



NC-20K-E1-ASS

Calibration Weight - E1 class

Application

Weights intended to ensure traceability between national mass standards (with values derived from the International Prototype of the kilogram) and weights of class E2 and lower.

Class E1 weights or weight sets shall be accompanied by a calibration certificate.

Used as a primary reference for calibrating other reference standards and weights where the stability of the environment and careful handling are assured. Class E1 weights have no method of adjustment and are not suitable for general laboratory use. The uncertainty is guaranteed to be 1/3 the tolerance.

Calibration Weight

E1

Technical Specifications

Brand	NSTAR
Model	NC-20K-E1-ASS
Class	OIML E1
Material	Austenitic stainless steel (Density 8.00 g/cm ³)
Cavity	Monoblock construction, No adjustable cavity
Surface	Highly polished mirror finish, [Rz < 0.5, Ra < 0.1 (µm)]
Magnetic Properties	Maximum magnetic polarization, $\mu_0 M$, (µT) < 2.5
Contents of Weights	20 kg
Marking	No denomination marking on test weights
Standards	OIML R-111, 2004 (E)
Certificate	NABL accredited certificate - 2 years validity



Shape

Cylindrical knob

Denomination

20 kg

Dimensions

Storage Case	Aluminium storage case
Weight Box Size	20 x 20 x 30 cm (L x W x H)
Net Weight	22.5 kg
Number of Package	1
Gross Weight	26 kg
Package Data	26 x 26 x 36 cm (L x W x H)
External Packing	Corrugated boxes

* test weights and storage case are packed separately for logistics purpose.



** weight lifting accessories are optional.*

Product Datasheet

NSTAR

Calibration Weight

E1

Tolerance and Uncertainties

Denominations	Tolerance# (mg)	Uncertainty* (mg)
20 kg	10.0	3.16

Maximum Permissible Errors (MPE) as per OIML R-111

* Accredited CMC of NSTAR Corp Metrology Department (CC-3213)

NSTAR Corp is offering assured 1/3rd uncertainty to the MPE for OIML E1 class weights.